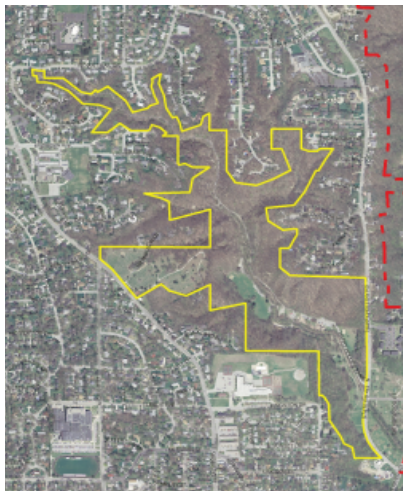
CITY OF WEST LAFAYETTE

WET WEATHER PROGRAM

Happy Hollow Park Erosion Control

Happy Hollow Park, which is surrounded on three sides by residential neighborhoods, offers recreational opportunities such as nature trails, playgrounds, softball fields, picnic shelters and sledding during the winter. The mostly forested 81-acre park has become a favorite gathering spot for youth and adults living nearby.



At the east end of the park near Happy Hollow Elementary School, an extensive ravine system directs stormwater that drains from the park and runs off of rooftops, streets and yards in the surrounding neighborhoods. While erosion is a natural process, development and associated increased runoff can result in accelerated erosion. In the Happy Hollow ravine system, soil, silt and pollutants are mixing with stormwater that flows into a dry creekbed and to the Wabash River. The polluted stormwater that flows from the ravine system can create an unhealthy environment for aquatic life in and around the Wabash River and other local waterways.

Stabilize the Ravine and Slow Erosion

To stabilize the ravine system and slow erosion, the city is considering installing gabions, which are rock-filled wire baskets, to help reinforce the slope of the banks and strengthen them. Erosion control turf blankets, land terracing, specialized vegetation, and new stormwater pipe are other methods that may be used to reduce the amount of sediment flowing to the creekbed.

Upstream of the ravine, the city proposes installing pervious pavement and rain gardens with native vegetation in residential areas. These improvements will reduce initial runoff, slow the flow of stormwater and naturally filter pollutants.

Reduce Sediment and Pollutants

Highlights

Project: Slope stabilization and erosion control
Estimated Project Cost: $4,450,000
Status: Planning
Project Benefits:

- Prevent erosion of the Happy Hollow Park ravines
- Improved drainage in the park and nearby residential neighborhoods
- Reduced sediment and pollutants in local waterways
- Enhanced aesthetics as a result of rain garden

The Happy Hollow slope stabilization project is part of West Lafayette's capital improvement program to improve the water quality of the Wabash River and other local streams and to address poor drainage conditions. The projects will reduce flooding and satisfy the requirements of the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management.